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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/890,098

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EXAMINER

FISHMAN, MARINA

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2833

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/890,098	Applicant(s) MEINHERZ ET AL.	
	Examiner Marina Fishman	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General status

1. This is a Final Action on the Merits. Claims 24 - 46 are pending in the case and are being examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 46 recites "switching device according to Claim 19", it is unclear how Claim 46 can depend on Claim 19, which is cancelled. The Examiner interprets Claim 46 depends from 29.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24 – 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marmonier [US 5,436,797] in view of Sakaguchi et al. [US 4,215,256].

Regarding Claims 24, Marmonier discloses a polyphase encapsulating, gas-insulated outdoor high-voltage switching device, which comprises:

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- a tubular switch enclosure [enclosures for D1, D2, D3 and B and E] extending along a longitudinal axis;
- a plurality of circuit breaker interrupter units [D1, D2] arranged parallel to one another in the tubular switch enclosure, the plurality of circuit breaker interrupter units including electrical cable connections [cable connections to 2] branching off at angles with respect to the longitudinal axis of the switch enclosure;
- a plurality of branching line connections [2]; and
- at least two direction-changing modules [modules where 2s are connected] for changing a direction of the electrical connections of the plurality of interrupter units into the plurality of branching line connections;
- the direction-changing modules being encapsulation modules;
- the switch enclosure including ends with connecting flanges [not numbered] for connection to the encapsulation modules.

Marmonier discloses the instant claimed invention except for a mounting frame and a drive device arranged to a side of the switch enclosure and drive device with rotary bearing located thereon.

Sakaguchi et al. disclose a switchgear apparatus with a mounting frame [Figure 7] and a drive device [60, 56, 62, 46, 68] arranged to a side of the switch enclosure.

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Sakaguchi et al. also disclose the drive device with a rotary bearing [between 56, 60, Figure 4] which is arranged in a casing region of the switch enclosure, in order to introduce the drive forces into the switch enclosure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a mounting frame and a drive in Marmonier, as suggested by Sakaguchi et al., in order to properly position the switching device and operate the circuit breakers for each of the phases.

Regarding Claims 25 - 27, Marmonier discloses the instant claimed invention including the enclosure being split asymmetrically [the end portion have length different than the central portion, a central portion has length which includes D1, B, E and D2]., however does not disclose the external diameters of the connecting flanges being less than the external diameter of the switching enclosure.

Sakaguchi et al. also disclose end module [BG] being connected with the main module with flange and the external diameters [not numbered, diameter of DS1] of the connecting flanges being less than the external diameter [not numbered, diameter of enclosure CB] of the switch enclosure [CB].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide flanges for connecting the end modules using flanges of diameter less than the external diameter of the switch enclosure in Marmonier, as suggested by Sakaguchi et al., in order to properly position the switching device with the end modules. As to accommodating the current transformers in the shorter part of the switch enclosure, the Examiner takes Official Notice that the use of current transformer

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in well known in similar switchgear and it would have been obvious to provide current transformers in the shorter part of the switch enclosure to measure the current.

Regarding Claim 28, Marmonier and Sakaguchi et al., disclose the switching device comprising a plurality of lever drives [56,42,46,84, 76, Sakaguchi Figure 4], the plurality of interrupter units including moveable contact pieces [20, 22], the plurality of lever drives coupling the drive device [68, 66] to the moveable contact pieces of the plurality of interrupter units, the casing region of the switch enclosure including a mounting flange [40] on which the drive device is mounted; and a drive enclosure [42] connected to the mounting flange of the switch enclosure, the rotary bearing [at various hinge points] arranged in the drive enclosure; each of the plurality of lever drives including a two-armed direction-changing lever with a rotary bearing supported in an insulating manner at the casing of the switch enclosure.

Regarding Claim 29 and 46, Marmonier and Sakaguchi et al., disclose the switching device. Marmonier, in Figure 2, also discloses a grounding switch associated with the disconnect switch S.

It would have been obvious to provide a grounding switch in device of Marmonier and Sakaguchi et al., as suggested by Figure 2 of Marmonier, in order to have grounding protection for the switch gear.

Regarding Claims 30 and 31, Marmonier, in Figure 5, discloses switching device comprising a cable connection module [2, Figure 5]; a direction-changing module [at the base] fit to the cable connection module; and a tubular encapsulation module [B, D1, D2] of a horizontally running three-phase busbar being connected to a second one of

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the direction-changing modules.

Regarding Claims 32 - 34, Marmonier, in Figure 5, discloses the switching device comprising outdoor bushings [Figure 5, not numbered]; at least one of the direction-changing modules formed as a splitting module with connections that branch off upwards in a spread manner for the outdoor bushings.

Regarding Claim 35, Marmonier, in Figure 5, discloses the switching device comprising the outdoor bushings have the connections lying in a common vertical plane.

Regarding Claim 36, Marmonier discloses the switching device, wherein each one of the direction-changing modules that is formed as a splitting module, is formed as a short hollow cylinder having an enclosure region that widens like a funnel, branches off radially. Marmonier discloses the claimed invention except for connection flanges.

It would have been obvious to provide connection flanges for the branching splitting modules, so as to be able to detachably connect the splitting modules. As to the recitation of connection planes lying tangentially against a part of a circle running concentrically with respect to an axis of the splitting module, the flanges would be equidistance from a center and hence a circle drawn passing through the flanges would satisfy this limitation.

Regarding Claims 37 and 41, Marmonier, in Figure 5, discloses the switching device as recited, including two direction changing modules, one at either end.

Regarding Claim 38, 39 and 42, Marmonier, in Figure 5, discloses the switching device as recited except for voltage transformer. The examiner takes official notice that use of voltage transformer is well known and it would have been obvious to one of

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ordinary skill in the art at the time of the invention, to provide voltage transformers on direction changing modules to measure the voltage at that location.

Regarding Claims 43 and 44 the device of Marmonier [Figure 5] and Sakaguchi et al., is capable of being arranged in an H-circuit. The limitations of Claim 45 disclosed by Marmonier [Figure 5] and Sakaguchi et al.,

Response to Arguments

6. Applicant's arguments filed 12/22/2009 have been fully considered but they are not persuasive.

In regards to Claim 24, on page 18 of the Remarks, the Applicant has argued that Marmonier does not show, a drive device 3 for introducing drive forces into the switch enclosure has a rotary bearing at its disposal on the side of the switch enclosure, which bearing is arranged in the casing region of the switch enclosure. The Examiner wishes to point out that the examiner has made 103 rejection and it is the combination of Marmonier and Sakaguchi et al satisfies the limitation of Claim 24. In particular, as pointed out in detail above, Sakaguchi et al. in Figure 4, discloses the drive device and linkages including the bearing etc. The Applicant has argued references individually; one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On page 19, the Applicant also stated that the examiner has used knowledge of the invention as a suggestion to now begun to look for the missing features in

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Sakaguchi et al. Marmonier does not suggest such a search (neither generally nor specifically in Sakaguchi et al.). Thus, Applicant believes that the teachings of Marmonier and Sakaguchi et al. would only be combined with the knowledge of the invention while looking retrospectively for the missing features in the state of the art in a mosaic-like manner. The Examiner respectfully disagrees. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As admitted by the applicant in the earlier discussion in the response, Marmonier discloses boxes, which could be interpreted as control devices; however the reference fails to provide adequate description of those boxes. The Examiner has used a secondary reference of Sakaguchi et al. to supplement the lack of information. It is a necessity that the circuit breaker-disconnector device would have operating device and Sakaguchi provides such teaching.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is (571)272-1991. The examiner can normally be reached on 5:30 - 4:00 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S. Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marina Fishman/
Examiner, Art Unit 2833

/Edwin A. León/
Primary Examiner
Art Unit 2833